What is claimed is:

1. An implant, comprising:

a bone-facing distal surface;

a proximal surface; and

a protrusion formed by an extension of said bone-facing distal surface and said proximal surface.

2. The implant of claim 1, wherein said distal surface is substantially round and said protrusion extends circumferentially from said distal surface.

3. The implant of claim 1, wherein said protrusion has a top surface, and wherein said top surface is a perimeter portion of said surface.

4. The implant of claim 1, wherein said bone-facing distal surface is configured to mate with an implant site created by excising a portion of articular surface and said proximal surface has a contour based on an original surface contour of said excised portion of said articular surface.

5. The implant of claim 4, wherein said implant has an arced side surface configured to abut an edge of an excised portion of articular surface.

6. The implant of claim 2, wherein a distal side of said radial extension is arcuate shaped.

7. The implant of claim 4, wherein said protrusion further comprises protuberances configured to engage said un-excised portion of said articular surface proximate to said implant.

8. The implant of claim 4, wherein said implant further comprises at least one indentation formed in said proximal surface configured to promote remodeling of articular cartilage over said proximal surface of said implant once seated.

9. The implant of claim 8, wherein said at least one indentation is a groove.

10. The implant of claim 9, wherein said groove comprises thru holes providing a path from said proximal surface to said distal surface.

11. The implant of claim 1, wherein said implant is artificial comprising at least one material selected from the group consisting of: ceramic, aluminum oxide, zirconium oxide, metal, metal alloy,Co-Cr-W-Ni, Co-Cr-M, CoCr alloy, CoCr Molybdenum alloy, Cr-Ni-Mn alloy, powder metal alloy, 316L stainless steel, Ti 6Al-4V ELI, polymer, polyurethane, polyethylene, wear resistant polyethylene, cross-linked polyethylene, thermoplastic elastomer, biomaterial, polycaprolactone, diffusion hardened material, Ti-

13-13, Zirconium, Niobium, porous coating system, hydrophilic coating, hydroxyapatite coating, and tri-calcium phosphate.

12. An implant for installation into a portion of an articular surface, said implant comprising:

a bone-facing distal surface configured to mate with an implant site created by excising a portion of said articular surface;

a proximal surface having a contour based on an original surface contour of said excised portion of said articular surface; and

a cavity configured to allow an un-excised portion of said articular surface proximate to said implant to remodel over a perimeter edge of said proximal surface.

13. The implant of claim 12, wherein said proximal surface has a first section substantially shaped to match said original surface contour of said excised portion and a second section depressed relative to said first section, said second section forming a floor of said cavity.

14. The implant of claim 12, wherein said implant further comprises at least one indentation formed in said proximal surface configured to promote remodeling of articular cartilage over a portion of said proximal surface of said implant once seated.

15. The implant of claim 14, wherein said at least one indentation is a groove.

16. The implant of claim 15, wherein said groove comprises thru holes providing a path from said proximal surface to said distal surface.

17. The implant of claim 12, wherein said implant is artificial comprising at least one material selected from the group consisting of: ceramic, aluminum oxide, zirconium oxide, metal, metal alloy,Co-Cr-W-Ni, Co-Cr-M, CoCr alloy, CoCr Molybdenum alloy, Cr-Ni-Mn alloy, powder metal alloy, 316L stainless steel, Ti 6Al-4V ELI, polymer, polyurethane, polyethylene, wear resistant polyethylene, cross-linked polyethylene, thermoplastic elastomer, biomaterial, polycaprolactone, diffusion hardened material, Ti-13-13, Zirconium, Niobium, porous coating system, hydrophilic coating, hydroxyapatite coating, and tri-calcium phosphate.

18. An implant for installation into a portion of an articular surface having an anterior portion, a posterior portion, a medial portion and a lateral portion, said implant comprising:

a bone-facing distal surface configured to mate with an implant site created by excising a portion of said articular surface; and

a proximal surface having a contour based on an original surface contour of said excised portion of said articular surface, and at least two side surfaces each having a concentric arcuate shape with a common center, wherein said implant has an elongate arcuate geometric shape.

19. The implant of claim 18, wherein said implant has a maximum arcuate length along said proximal surface from a first end of said implant seated proximate to said anterior portion of said articular surface to a second end of said implant seated proximate to said posterior portion of said articular surface, and a maximum arcuate width along said proximal surface from a third end of said implant seated proximate to said medial portion of said articular surface to a fourth end of said implant seated proximate to said lateral portion of said articular surface, wherein said arcuate length is greater than said arcuate width.

20. The implant of claim 18, wherein said distal surface is substantially planar to match said implant site having a substantially planar shape.

21. The implant of claim 18, further comprising a protrusion configured to cover an un-excised portion of said articular surface proximate to said implant.

22. The implant of claim 21, wherein said protrusion extends radially from said first and second ends.

23. The implant of claim 18, wherein said implant further comprises at least one indentation formed in said proximal surface configured to promote remodeling of articular cartilage over a portion of said proximal surface of said implant once seated.

24. The implant of claim 23,, wherein said at least one indentation is a groove.

25. The implant of claim 24, wherein said groove comprises thru holes providing a path from said proximal surface to said distal surface.

26. The implant of claim 18, wherein said implant is artificial comprising at least one material selected from the group consisting of: ceramic, aluminum oxide, zirconium oxide, metal, metal alloy, Co-Cr-W-Ni, Co-Cr-M, CoCr alloy, CoCr Molybdenum alloy, Cr-Ni-Mn alloy, powder metal alloy, 316L stainless steel, Ti 6A1-4V ELI, polymer, polyurethane, polyethylene, wear resistant polyethylene, cross-linked polyethylene, thermoplastic elastomer, biomaterial, polycaprolactone, diffusion hardened material, Ti-13-13, Zirconium, Niobium, porous coating system, hydrophilic coating, hydroxyapatite coating, and tri-calcium phosphate.

27. A method for replacing a portion of an articular surface of bone, said method comprising:

establishing a working axis substantially normal to an articular surface of bone;

excising a portion of said articular surface adjacent to said axis, thereby creating an implant site, said implant site having a first and second opposing arcuate shaped sides; and

installing an implant to said implant site.

28. The method of claim 27, wherein said excising is performed by cutting at least a portion of said articular surface radially symmetrical about said axis.

29. The method of claim 28, wherein said cutting is performed by a cutting tool that rotates about said axis.

30. The method of claim 29, wherein said cutting tool has a circular blade portion, said circular blade portion having a diameter greater than a width of said implant site, wherein said articular surface has a medial side and a lateral side defining said width of said implant site.

31. The method of claim 27, wherein said working axis is established based on a first curve and second curve.

32. The method of claim 31, wherein said first curve is an anterior-posterior (AP) curve and said second curve is a medial-lateral (ML) curve.

33. The method of claim 27, further comprising the step of:

covering an un-excised portion of said articular surface proximate to said implant.

34. The method of claim 27, wherein said implant comprises:

a bone-facing distal surface configured to mate with said implant site;

a proximal surface having a contour based on an original surface contour of said excised portion of said articular surface; and

first and second opposed side surfaces, said first and second opposed side surfaces being arcuate and configured to mate with said first and second sides of said implant site.

35. The method of claim 34, wherein said implant further comprises a third and fourth opposed side surface.

36. The method of claim 34, wherein said implant further comprises a protrusion configured to cover an un-excised portion of said articular surface proximate to said implant.

37. The method of claim 36, wherein said protrusion extends radially from said first and second arcuate shaped side surfaces of said implant.

38. A method of replacing a portion of an articular surface of bone, said method comprising:

locating an existing defect in said articular surface;

establishing a working axis substantially normal to said articular surface and substantially centered with said existing defect;

excising a portion of said articular surface adjacent to said axis, thereby creating an implant site; and

installing an implant in said implant site, wherein at least a portion of said existing defect is exposed around a perimeter of said implant.

39. The method of claim 38, wherein said portion excised by said excising step has a surface area less than a surface area of said defect.

40. The method of claim 38, wherein said portion excised is bone.

41. The method of claim 38, wherein said excising step is performed by cutting at least a portion of said articular surface radially symmetrical about said axis.

42. The method of claim 41, wherein said cutting is performed by a cutting tool that rotates about said axis.

43. The method of claim 42, wherein said cutting tool has a circular blade portion, said circular blade portion having a diameter greater than a width of said implant site, wherein said articular surface has a medial side and a lateral side defining said width of said implant site.

44. The method of claim 38, wherein said implant comprises:

a bone-facing distal surface configured to mate with said implant site;

a proximal surface having a contour based on an original surface contour of said excised portion of said articular surface; and

a cavity configured to allow an un-excised portion of said articular surface proximate to said implant to remodel over a perimeter edge of said proximal surface.

45. The method of claim 44, wherein said proximal surface has a first section substantially shaped to match said original surface contour of said excised portion and a second section depressed relative to said first section, said second section forming a floor of said cavity.

46. An implant for installation into a portion of an articular surface, said implant comprising:

a bone-facing distal surface configured to mate with an implant site created by excising a portion of said articular surface;

a proximal surface having a contour based on an original surface contour of said excised portion of said articular surface; and

at least one arcuate shaped side surface configured to abut an edge of said excised portion of said articular surface, said arcuate shaped side surface having a radial extension configured to cover an un-excised portion of said articular surface proximate to said implant.

47. The implant of claim 46, wherein said implant is substantially round and said arcuate shaped side surface extends circumferentially along said implant.

48. The implant of claim 46, wherein said implant has a first side, said first side being said arcuate shaped side surface.

49. The implant of claim 48, wherein said implant has a second side opposing said first side, said second side also being an arcuate shaped side surface.

50. A method for replacing a portion of an articular surface of bone, said method comprising:

establishing a working axis substantially normal to an articular surface of bone, said articular surface having a medial side and lateral side defining a width of said articular surface;

excising a portion of said articular surface adjacent to said axis, thereby creating an implant site, wherein said excising is performed using a cutting tool that rotates about said axis, said cutting tool having a circular blade portion, said circular blade portion having a diameter greater than said width of said articular surface; and

installing an implant to said implant site.

51. An implant for installation into a portion of an articular surface, said implant comprising:

a bone-facing distal surface configured to mate with an implant site created by excising a portion of said articular surface; and

a proximal surface having a contour based on an original surface contour of said excised portion of said articular surface, wherein said proximal surface has at least one indentation formed in said proximal surface configured to promote remodeling of articular cartilage over a portion of said proximal surface of said implant once seated.

52. The implant of claim 51, wherein said at least one indentation is a groove.

53. The implant of claim 52, wherein said groove is a continuous groove from one perimeter point to another perimeter point across said proximal surface, and wherein said groove comprises at least one thru hole providing a path from said proximal surface to said distal surface.

54. The implant of claim 51, wherein said at least one indentation is formed in a perimeter edge of said proximal surface.